

Title (en)

Device for detecting the status of a machine element

Title (de)

Vorrichtung zur Erfassung des Zustands eines Maschinenelements

Title (fr)

Dispositif de détection de l'état d'un élément de machine

Publication

EP 2894448 B1 20190731 (DE)

Application

EP 14197540 A 20141212

Priority

DE 102014100124 A 20140108

Abstract (en)

[origin: CN104764550A] A device (1) for detecting the mechanical state of a machine element that can rotate about an axis (3), such as a shaft (2), comprises an actuator (4) disposed on the machine element (2) to be axially movable, means (9, 10, 11, 12) for converting a torsion of the machine element (2) into an axial displacement of the actuator (4) and a sensor (5) disposed so as to be stationary relative to the machine element (2), for detecting the axial displacement of the actuator (4). The invention is characterized in that a mark (6) is assigned to the actuator (4) and the mark is detected by the sensor (5) in order to detect the axial displacement of the actuator (4), wherein a speed (n) of the machine element (2) is determined from the number of marks (6) that are detected per unit of time.

IPC 8 full level

G01L 3/06 (2006.01); **G01L 3/08** (2006.01); **G01L 5/00** (2006.01); **G01P 3/36** (2006.01)

CPC (source: EP RU US)

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G01P 3/36 (2013.01 - US)

Citation (examination)

- JP S58103630 A 19830620 - MITSUBISHI ELECTRIC CORP
- JP 2007010398 A 20070118 - JAPAN SERVO

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DOCDB simple family (publication)

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DE 102014100124 A1 20150709; RU 2014153431 A 20160720; RU 2014153431 A3 20180514; RU 2675189 C2 20181217;
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